

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference OP050027_WJ	FOR FURTHER ACTION		See item 4. below
International application No. PCT/KR2005/004546	International filing date (<i>day/month/year</i>) 26 December 2005 (26.12.2005)	Priority date (<i>day/month/year</i>) 20 September 2005 (20.09.2005)	
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237			
Applicant WOONGJINCOWAY CO, LTD, .			

1.	This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a).		
2.	This REPORT consists of a total of 3 sheets, including this cover sheet. In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.		
3.	This report contains indications relating to the following items:		
	<input checked="" type="checkbox"/> Box No. I	Basis of the report	
	<input type="checkbox"/> Box No. II	Priority	
	<input type="checkbox"/> Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	
	<input type="checkbox"/> Box No. IV	Lack of unity of invention	
	<input checked="" type="checkbox"/> Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	
	<input type="checkbox"/> Box No. VI	Certain documents cited	
	<input type="checkbox"/> Box No. VII	Certain defects in the international application	
	<input type="checkbox"/> Box No. VIII	Certain observations on the international application	
4.	The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).		

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. +41 22 338 82 70	Date of issuance of this report 26 March 2008 (26.03.2008)
	Authorized officer Philippe Becamel e-mail: pt12.pct@wipo.int

PATENT COOPERATION TREATY

To:

LEE Bong-Jin
1610 Hyundai Venturitel
642-1 Yeoksam 1-dong Gangnam-gu
135-910 Seoul
Republic of Korea

PCT

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Date of mailing (day/month/year)	10 May 2006 (10.05.2006)
-------------------------------------	--------------------------

Applicant's or agent's file reference OP050027 _{WJ}	FOR FURTHER ACTION See paragraph 2 below
---	---

International application No. PCT/KR 2005/004546	International filing date (day/month/year) 26 December 2005 (26.12.2005)	Priority Date (day/month/year) 20 September 2005 (20.09.2005)
---	---	--

International Patent Classification (IPC) or both national classification and IPC B01D 61/02 (2006.01)
--

Applicant WOONGJINCOWAY CO., LTD.

1. This opinion contains indications relating to the following items:

- ☒ Cont. No. I Basis of the opinion
- ☐ Cont. No. II Priority
- ☐ Cont. No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Cont. No. IV Lack of unity of invention
- ☒ Cont. No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Cont. No. VI Certain documents cited
- ☐ Cont. No. VII Certain defects in the international application
- ☐ Cont. No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/ AT Austrian Patent Office Dresdner Straße 87, A-1200 Vienna	Authorized officer STEPANOVSKY M.
Facsimile No. +43 / 1 / 534 24 / 535	Telephone No. +43 / 1 / 534 24 / 135

Continuation No. I

Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed.

Continuation No. V

Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims 1-10	YES
	Claims ----	NO
Inventive step (IS)	Claims 1-10	YES
	Claims ----	NO
Industrial applicability (IA)	Claims 1-10	YES
	Claims ----	NO

2. Citations and explanations:

Novelty:

The cited literature shows the preparation and the use of reverse osmosis membranes. There could not be found a preparation method for a TFC reverse osmosis membrane using interfacial polymerisation of an amine aqueous solution and amine-reactive compound with post treatment of the polyamide layer by contacting with an aqueous solution containing a polyfunctional tertiary alcohol amine. So the subject-matters of the present application are new, since they are not totally described in the cited literature.

Inventive step:

The resulting advantageous effects of the preparation method for a TFC reverse osmosis membrane using interfacial polymerisation of an amine aqueous solution and amine-reactive compound with post treatment of the polyamide layer by contacting with an aqueous solution containing a polyfunctional tertiary alcohol amine, as claimed could not be foreseen, therefore the subject matters claimed meet the requirements of inventiveness.

Industrial applicability:

The industrial applicability of the preparation method of the polyamide thin film composite reverse osmosis membrane, of the present application is self-evident.